



Florida Department of  
**TRANSPORTATION**

# **Roadway Characteristics Inventory Program Updates**

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Transportation Statistics Office**

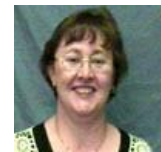
# Overview of Updates

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- Section Update
- Features and Characteristics
- RCI Handbook Updates
- RCI Training
- Freight and Modal Data
- Questions/Comments?

# Program Staffing Responsibilities

- Joel Worrell
  - Transportation Data Inventory Manager
- Judy Lenczyk
  - Transportation Data Coordinator
- Tina Hatcher
  - Transportation Data Application Coordinator
- Andrea Hodge
  - Statewide Quality Assurance Coordinator
- Chris Talbot
  - Video Log Coordinator
- Jerry Scott
  - Freight Data Systems Coordinator



# Quick Intro:

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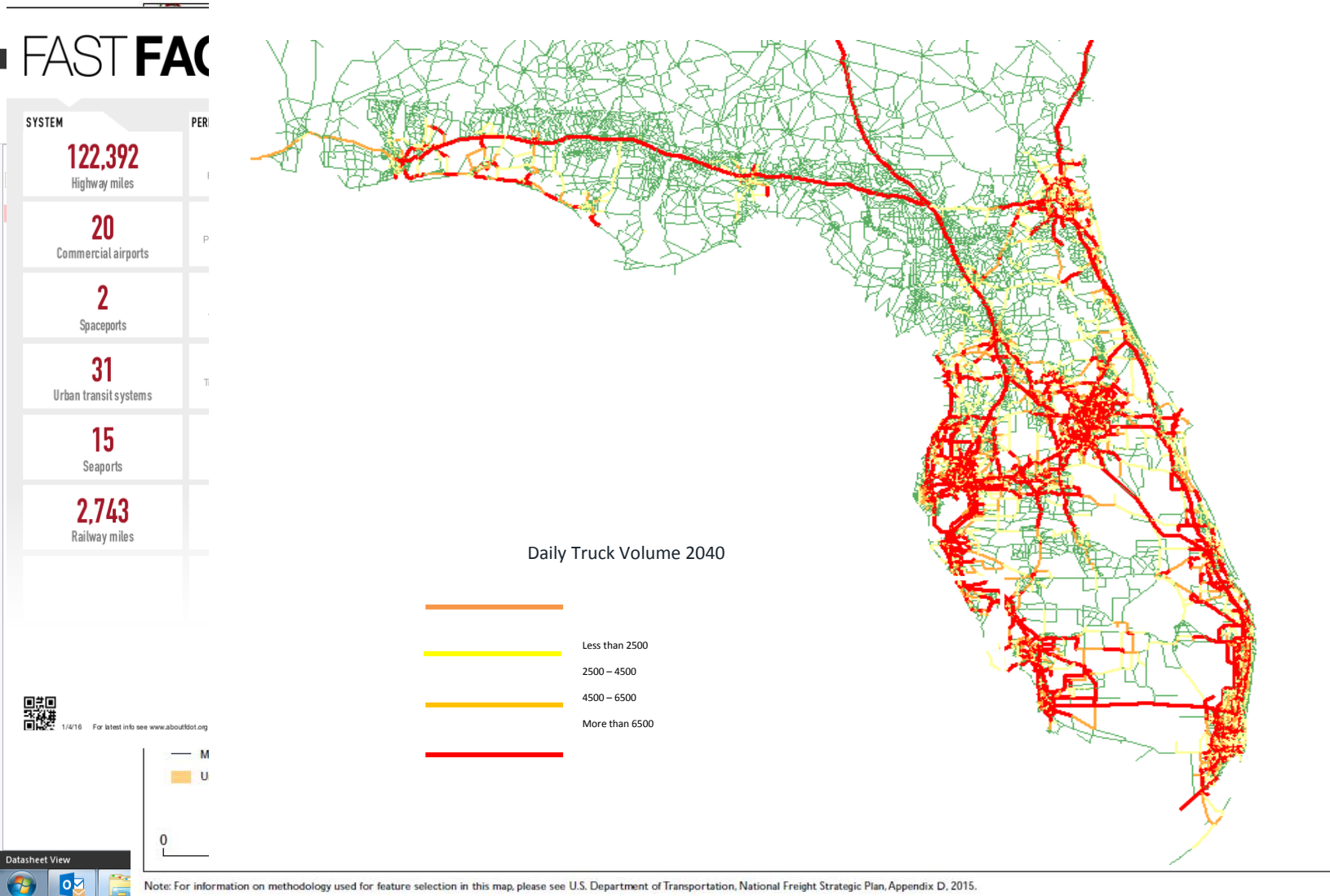
- This won't be long...

# Transportation Data Inventory

- Section Responsibilities:
  - Roadway Characteristics Inventory Database
  - Straight Line Diagrams & Programs
  - Quality Assurance Reviews
  - District Quality Evaluations
  - Quality Control Monitoring Plan
  - Video Log Program
  - Program Support – Training and Handbooks
  - Freight and Modal Data Program

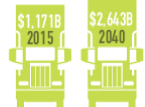
# Why Freight and Modal Data into RCI?

## Florida Multimodal Freight Network - Draft Representation



## ON TRENDS

### Freight Moves Florida



Growth in freight value

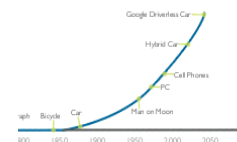
### Growing Opportunity

The Panama Canal expansion opens new trade opportunities for Florida.



9 out of 10

Floridians live in urban areas



=16"	=2"	=3"
=06"	=2"	=1"
=17"	=0"	=3"
=19"	=0"	=3"
=19"	=0"	=3"
=19"	=0"	=3"

NUM LOCK

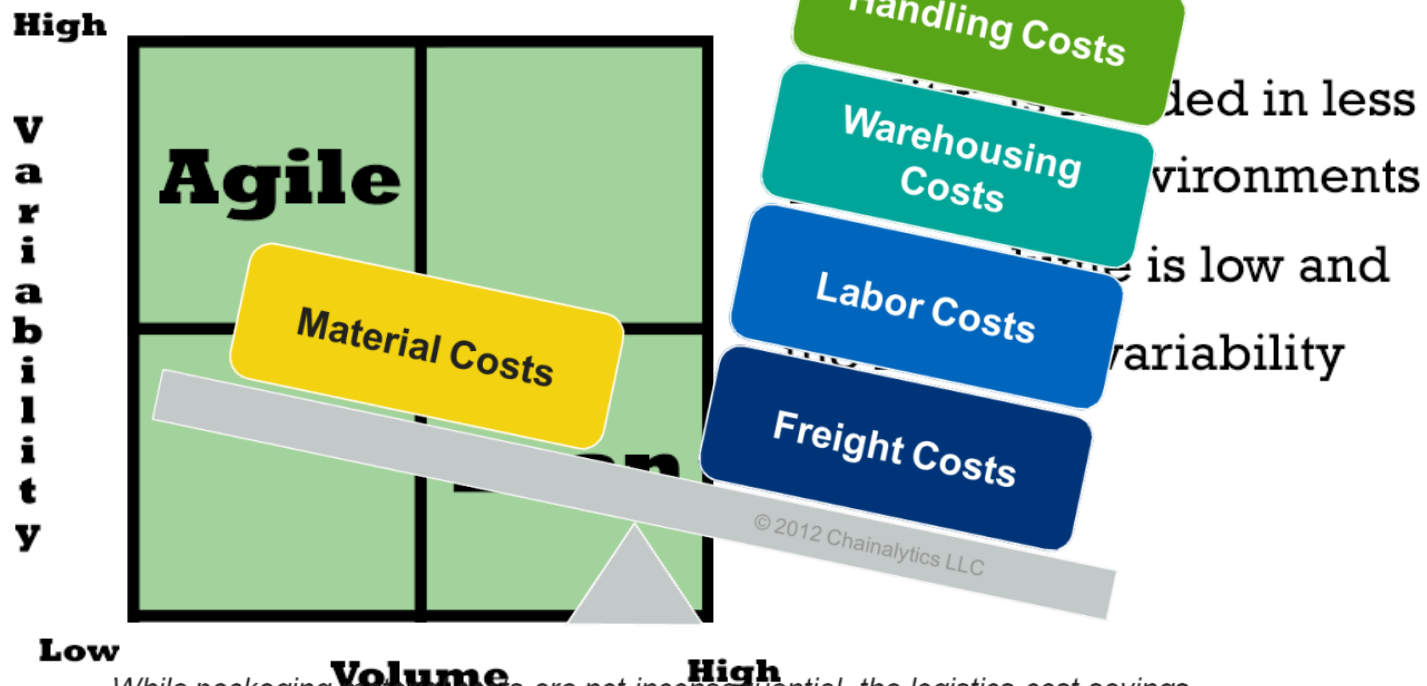
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# Why Freight and Modal Data into RCI?

Push-Based Model

## The Impact of Packaging on the Supply Chain Material Costs vs. Logistics Costs **Agile Vs. Lean**



While packaging material costs are not inconsequential, the logistics cost savings associated with supply chain packaging optimization are often far greater.

# New Features Added

RCI Features & Characteristics Handbook  
**Passenger Rail - Feature 902**  
**Owning Office: Rail and Motor Carrier Operations**

## RRMANENT Railroad Managing Entity

Railroad Side: C Feature Type: Length Secured: Yes

**Definition/Background:** Identifies managing entity for railroad facilities. Effective August 2014.

**Responsible Party for Data Collection:** Central Rail and Motor Carrier Operations Office or Systems Planning Office. For further assistance, please contact Central Rail and Motor Carrier Operations Office at (850) 414-4500 or the SIS Transportation Planner & ETDM Coordinator at (850) 414 4907

**Required For:** All designated managing railroad facilities

**Who/What uses this Information:** Central and District Rail and Motor Carrier Operations Office

**How to Measure:** Record the beginning and ending milepoints.

**How to Gather this Data:** Enter the code value assigned to the railroad facility.

### Codes:

Railroad Managing Entity:  
 0 – Non-FDOT  
 1 – FDOT



## RRPASSER Railroad Passenger

Railroad Side: C Feature Type: Length Secured: Yes

**Definition/Background:** Associates with passenger system for the railroad facilities. Effective August 2014.

**Responsible Party for Data Collection:** Central Rail and Motor Carrier Operations Office or Systems Planning Office. For further assistance, please contact Central Rail and Motor Carrier Operations Office at (850) 414-4500 or the SIS Transportation Planner & ETDM Coordinator at (850) 414 4907

**Who/What uses this Information:** Central and District Rail and Motor Carrier Operations Office

**Required For:** All designated SIS, emerging SIS, and non-SIS railroad facilities

**How to Measure:** Identify the owning authority (see below) and record the beginning and ending milepoints.

**How to Gather this Data:** Enter the railroad company name (RRCONAME) codes assigned to the railroad facility. Reference Feature 901 for the railroad company name code values.

### Codes:

SUNRL – SunRail  
 AAFL – All Aboard Florida  
 AMTK – Amtrak  
 TRIRL – Tri-Rail



RCI Features & Characteristics Handbook  
**Railroad Passenger Station Name - Feature 903**  
**Owning Office: Rail and Motor Carrier Operations**

## RPASTNAM Railroad Passenger Station Name

Railroad Side: C Feature Type: Point Secured: Yes

**Definition/Background:** Identifies passenger rail stations on the rail system in Florida, including SIS rail network and those not on the SIS rail network. These include passenger stations on the Tri-Rail Commuter Rail system, and the Sun Rail Commuter Rail system, which are considered urban fixed guideway transit hubs and stations on the SIS rail network; this feature also includes the AMTRAK stations on the rail system in Florida. Some of these are also considered Intermodal Passenger Terminals on the SIS rail network. This feature may also include future undefined passenger rail stations on other systems in Florida.

**Responsible Party for Data Collection:** Central Rail and Motor Carrier Operations Offices or Systems Planning Office. For further assistance, please contact Central Rail and Motor Carrier Operations Offices at (850) 414-4500 / or the SIS Transportation Planner & ETDM Coordinator at (850) 414 4907

**Who/What uses this Information:** Central Rail and Motor Carrier Operations Offices, or District Rail and Motor Carrier Operations Offices, Systems Planning and Policy Planning Offices for the eSIS application, District Planning Offices, District Maintenance Offices, and South Florida Rail Corridor Management Office

**Required For:** All passenger rail stations in Florida

**How to Measure:** Identify the station names, see below and record the milepoint

**How to Gather this Data:** Enter the railroad station name, RSTATNAM codes assigned to the station location. Reference Feature 901 for the railroad roadway ID.

### Codes:

ALTA – Altamonte Springs Sun Rail Station	LONG – Longwood Sun Rail Station
BOCA – Boca Raton Tri-Rail Station	LYNX – LYNX Central Sun Rail Station
BOYN – Boynton Beach Tri-Rail Station	MAIT – Maitland Sun Rail Station
CHCH – Church Street Sun Rail Station	MANG – Mangonia Park Tri-Rail Station
CYPC – Cypress Creek Tri-Rail Station	MEAW – Meadow Woods Sun Rail Station
DEB – DeBary Sun Rail Station	MIC – Miami Intermodal Center
DEER – Deerfield Beach Amtrak/Tri-Rail	OPA – Opa Locka Tri-Rail Station
DELB – Delray Beach Amtrak/Tri-Rail Station	ORLA – Orlando Health Sun Rail Station
FLHH – FL Hospital Health Village Sun Rail	OSC – Osceola Parkway Sun Rail Station
FTL – Fort Lauderdale Amtrak/Tri-Rail	POIN – Poinciana Sun Rail Station
FLAP – Ft Lauderdale/Hollywood Airport Tri-Rail	POMP – Pompano Beach Tri-Rail Station
GG – Golden Glades Tri-Rail Station	SAND – Sand Lake Road Sun Rail Station
HAL – Hialeah Market Tri-Rail Station	SANF – Sanford Sun Rail Station
HWD – Hollywood Amtrak/Tri-Rail Station	SHER – Sheridan Street Tri-Rail Station
KISS – Kissimmee Intermodal Center SunRail	TRM – Tri-Rail/Metrorail Transfer Station
MARY – Lake Mary Sun Rail Station	WPB – West Palm Beach Intermodal Center
LKW – Lake Worth Tri-Rail Station	WINP – Inter Park Sun Rail Station

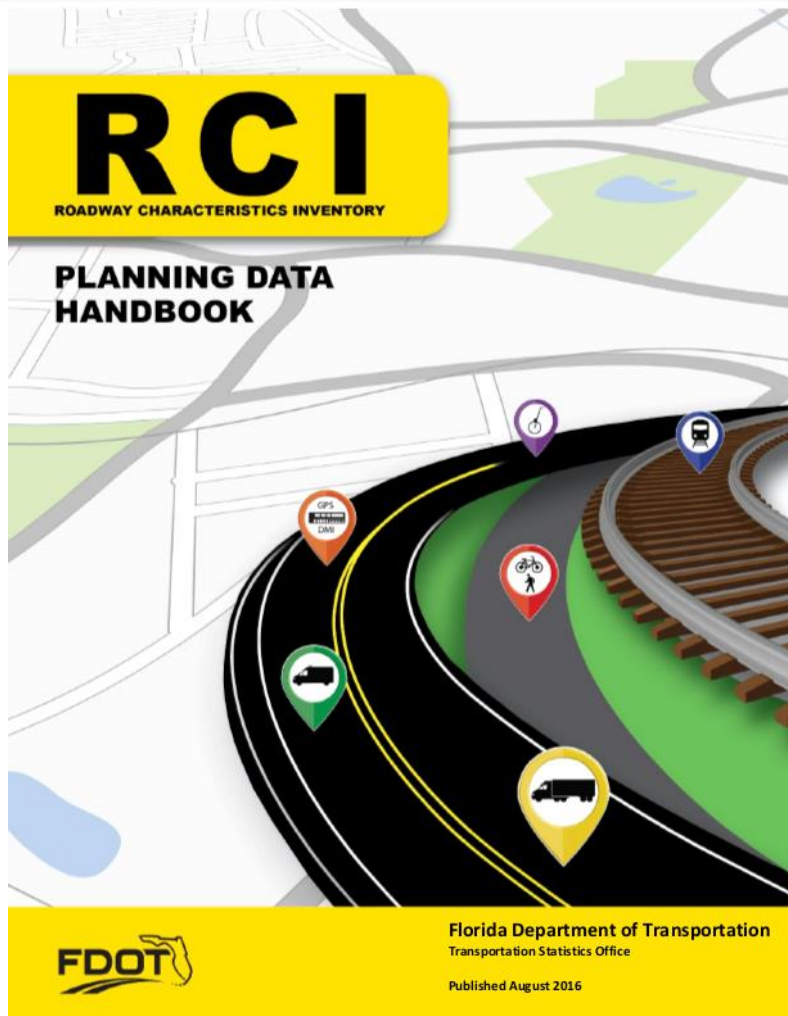


# New Characteristics Added

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- Feature 258 – Structures
  - Tunnel Number - TUNNELNO
- Feature 341 – Lighting System
  - Owner of Local Luminaries - LOCOWNER
- Feature 413 – Landscape Area
  - Bold Landscaping - BOLDAND

# FDOT RCI Handbook Update



- August 2016 Print Edition
- Order from Maps and Publications

Roadway Characteristics Inventory Features & Characteristics Handbook (249 pages)		
	Color	Black & White
Full size	\$ 11.65	\$ 1.63
Half size	\$ 6.28	\$ 0.92
Roadway Characteristics Inventory Planning Data Handbook ( 138 pages)		
	Color	Black & White
Full size	\$ 6.57	\$ 1.00
Half size	\$ 3.41	\$ 0.58

# FDOT RCI Training Update



A Virtual Campus  
for Transportation Planning

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## Course Catalog by Program

### Programs

#### Filters

Use the select box below to filter the catalog.

Show me  catalog offerings

#### Course Catalog Legend

- View** No user account required. No credit hours awarded.
- Enroll** Courses that lead to a certificate and are open to all visitors who have created a free TransPortal account.
- Restricted** Enrollment restricted to FDOT district nominated staff.

☐ TransPortal Orientation

☐ Highway Performance Monitoring System (HPMS)

☐ Project Traffic Forecasting

☐ Roadway Characteristics Inventory (RCI)

This course addresses data entry and use of the RCI system. It reflects the current RCI program application as well as other applications associated with RCI.

<input type="checkbox"/> Introduction to Straight-Line Diagrams (SLD) BT-04-0047 (2 credit hours)	<a href="#">View</a>
<input type="checkbox"/> Planning RCI Basics BT-04-0053 (8 credit hours)	<a href="#">Enroll</a>
<input type="checkbox"/> Planning RCI Fundamentals 101 BT-04-0050 (16 credit hours)	<a href="#">Enroll</a>
<input type="checkbox"/> Planning RCI Fundamentals 102 BT-04-0051 (16 credit hours)	<a href="#">Enroll</a>
<input type="checkbox"/> Planning RCI Fundamentals 103 BT-04-0052 (16 credit hours)	<a href="#">Enroll</a>
<input type="checkbox"/> Planning RCI Fundamentals 101 (2015) BT-04-0050 (16 credit hours)	<a href="#">Enroll</a>
<input type="checkbox"/> Planning RCI Fundamentals 102 (2015) BT-04-0051 (16 credit hours)	<a href="#">Enroll</a>
<input type="checkbox"/> Planning RCI Fundamentals 103 (2015) BT-04-0052 (16 credit hours)	<a href="#">Enroll</a>

<http://transportal.org/index.cfm?fuseaction=catalog.publicView#>

# Freight and Modal Data Program

## *ENHANCING FLORIDA'S FREIGHT ECONOMY THROUGH MULTIMODAL DATA AND INFORMATION RESOURCES*

### **GOAL 1:**

Establish consistency & effective data access, collection, & reporting of freight and modal data.

### **GOAL 2:**

Integrate Freight & Modal Data Resources in FDOT Operations & Planning Offices.

### **GOAL 3:**

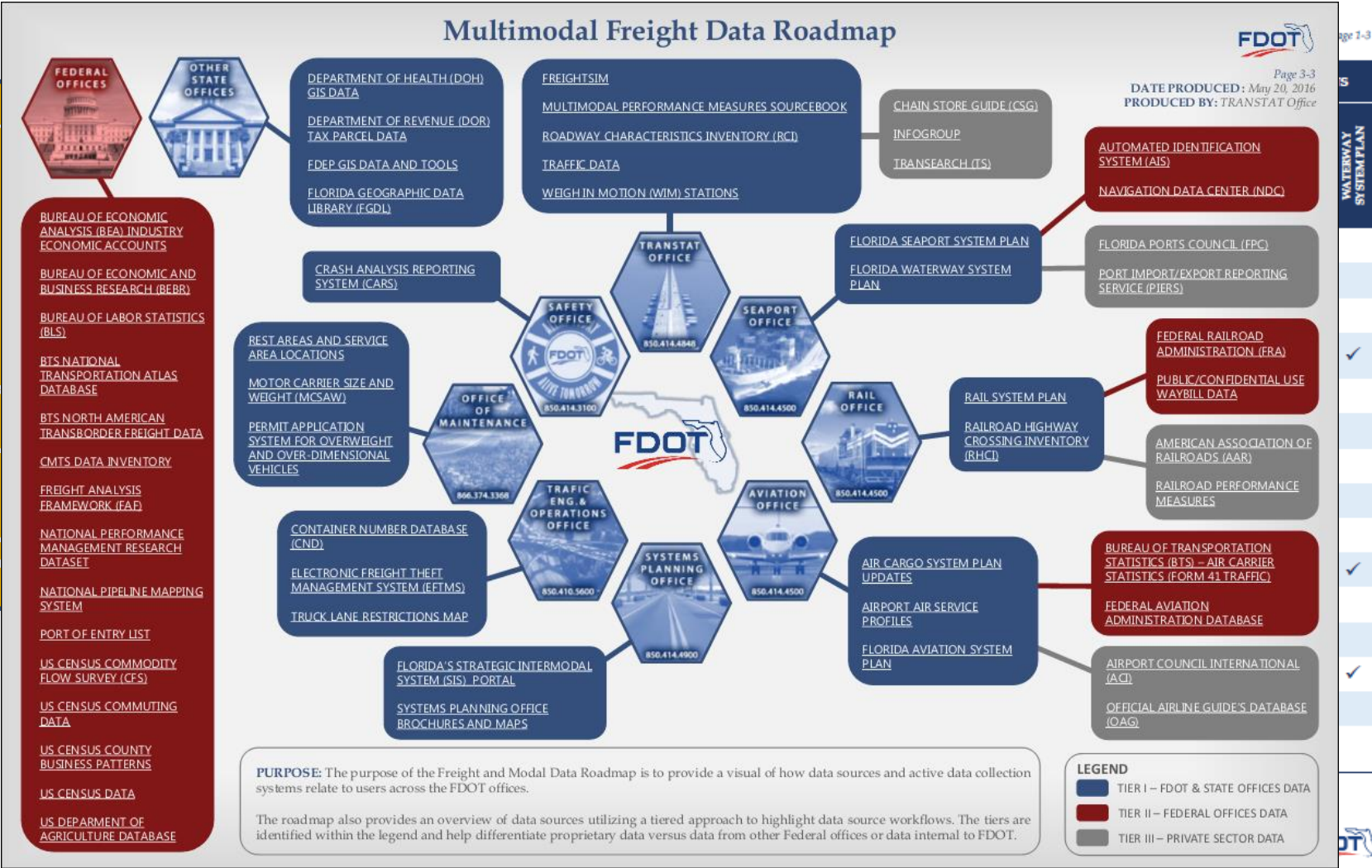
Coordinate Department Data Investments & Improvements.

### **GOAL 4:**

Provide Training & Awareness of Data, Datasets, Tools, & Models.



# Multimodal Freight Data Inventory



Reference NCFRP Report 35, *Implementing the Freight Transportation Data Architecture: Data Element Dictionary*.

# Commodity Flow Data Analysis

USER GUIDANCE

USER GUIDANCE

FIGURE 4-2: DISTRICT FIVE TRANSEARCH AND FAF ZONES AND TONNAGE DATA CONTINUED ...

FAF DATA						
MODE OF TRANSPORTATION	TOTAL DISTRICT 5 TONS					TOTAL
	ENTERING ORLANDO METRO AREA		LEAVING ORLANDO METRO AREA		WITHIN DISTRICT 5	
	FROM THE REST OF FLORIDA	FROM THE REST OF THE COUNTRY	TO THE REST OF FLORIDA	TO THE REST OF THE COUNTRY		
Truck	36,548,281	8,777,884	32,768,890	3,273,693	72,078,927	153,447,674
Rail	51,789	1,865,737	45,070	439,720	3,451	2,405,766
Water	3	71,497	7	1,490	0	72,996
Air (incl. Truck-Air)	1,111	21,700	10	7,630	0	30,450
Multiple Modes & Mail	1,130,746	1,134,350	72,672	96,096	54,061	2,487,925
Pipeline	30	3,537,239	7	1,799	0	3,539,076
Other and Unknown	162,568	179,230	188,172	90,026	808,546	1,428,541
Total, All Modes	37,894,527	15,587,637	33,074,827	3,910,452	72,944,985	163,412,427

## 4.1.3 MIAMI-DADE COUNTY

Figure 4-3 shows that the TRANSEARCH data can be summarized to Miami-Dade County according to the county boundaries. The FAF zone for this area, however, covers three counties: Miami-Dade, Broward and Palm Beach Counties. This section illustrates a common technique used to apportion commodity flow data from a larger geography to a smaller geography.

FIGURE 4-3: MIAMI-DADE COUNTY TRANSEARCH AND FAF ZONES AND TONNAGE DATA

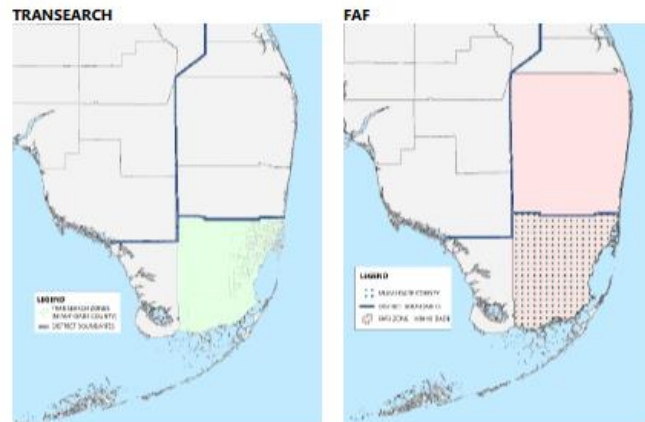


FIGURE 4-3: MIAMI-DADE COUNTY TRANSEARCH AND FAF ZONES AND TONNAGE DATA CONTINUED

MODE OF TRANSPORTATION		TOTAL DISTRICT 5 TONS					TOTAL
		ENTERING MIAMI-DADE COUNTY		LEAVING MIAMI-DADE COUNTY		WITHIN MIAMI-DADE COUNTY	
		FROM THE REST OF FLORIDA	FROM THE REST OF THE COUNTRY	TO THE REST OF FLORIDA	TO THE REST OF THE COUNTRY		
Truck	Truck Truckload	7,455,742	9,770,514	11,939,057	2,496,743	8,580,930	40,242,986
	Truck L-T-L	171,143	586,204	337,433	208,190	71,080	1,374,050
	Truck PVT	6,985,597	4,686,192	12,880,078	1,342,523	6,691,342	32,585,732
	Truck NEC	0	183,243	0	178,254	0	361,497
	Subtotal	14,612,482	15,226,153	25,156,568	4,225,710	15,343,351	74,564,265
Rail	Rail NEC	0	212,747	0	7,778	0	220,525
	Subtotal	0	212,747	0	7,778	0	220,525
Water	Water	158,220	2,870,199	65,757	49,134	79,256	3,222,566
	Subtotal	158,220	2,870,199	65,757	49,134	79,256	3,222,566
Air	Air	1,485	78,971	344	33,902	0	114,702
	Subtotal	1,485	78,971	344	33,902	0	114,702
Other and Unknown	Foreign Trade Zones	0	64	0	0	0	64
	Other	0	149	0	258	0	407
	Subtotal	0	213	0	258	0	471
	Total, All Modes	14,772,186	18,388,282	25,222,670	4,316,783	15,422,607	78,122,529

FAF DATA						
MODE OF TRANSPORTATION	TOTAL DISTRICT 5 TONS					TOTAL
	ENTERING MIAMI METRO AREA		LEAVING MIAMI METRO AREA		WITHIN MIAMI METRO AREA	
	FROM THE REST OF FLORIDA	FROM THE REST OF THE COUNTRY	TO THE REST OF FLORIDA	TO THE REST OF THE COUNTRY		
Truck	18,362,141	17,207,193	28,007,639	9,637,935	183,183,882	256,398,790
Rail	375,006	2,172,659	751,680	2,512,963	939,123	6,751,430
Water	104	3,826,209	885	3,066,226	22,792	6,916,215
Air (incl. Truck-Air)	391	115,306	511	37,460	0	153,668
Multiple Modes & Mail	733,658	2,791,375	2,672,718	6,811,676	1,113,737	14,123,163
Pipeline	92	8,630,802	16	17,917	0	8,648,827
Other and Unknown	148,144	436,057	200,383	1,130,313	4,173,496	6,088,393
<b>Total, All Modes</b>	<b>19,619,536</b>	<b>35,179,600</b>	<b>31,633,832</b>	<b>23,214,489</b>	<b>189,433,029</b>	<b>299,080,485</b>

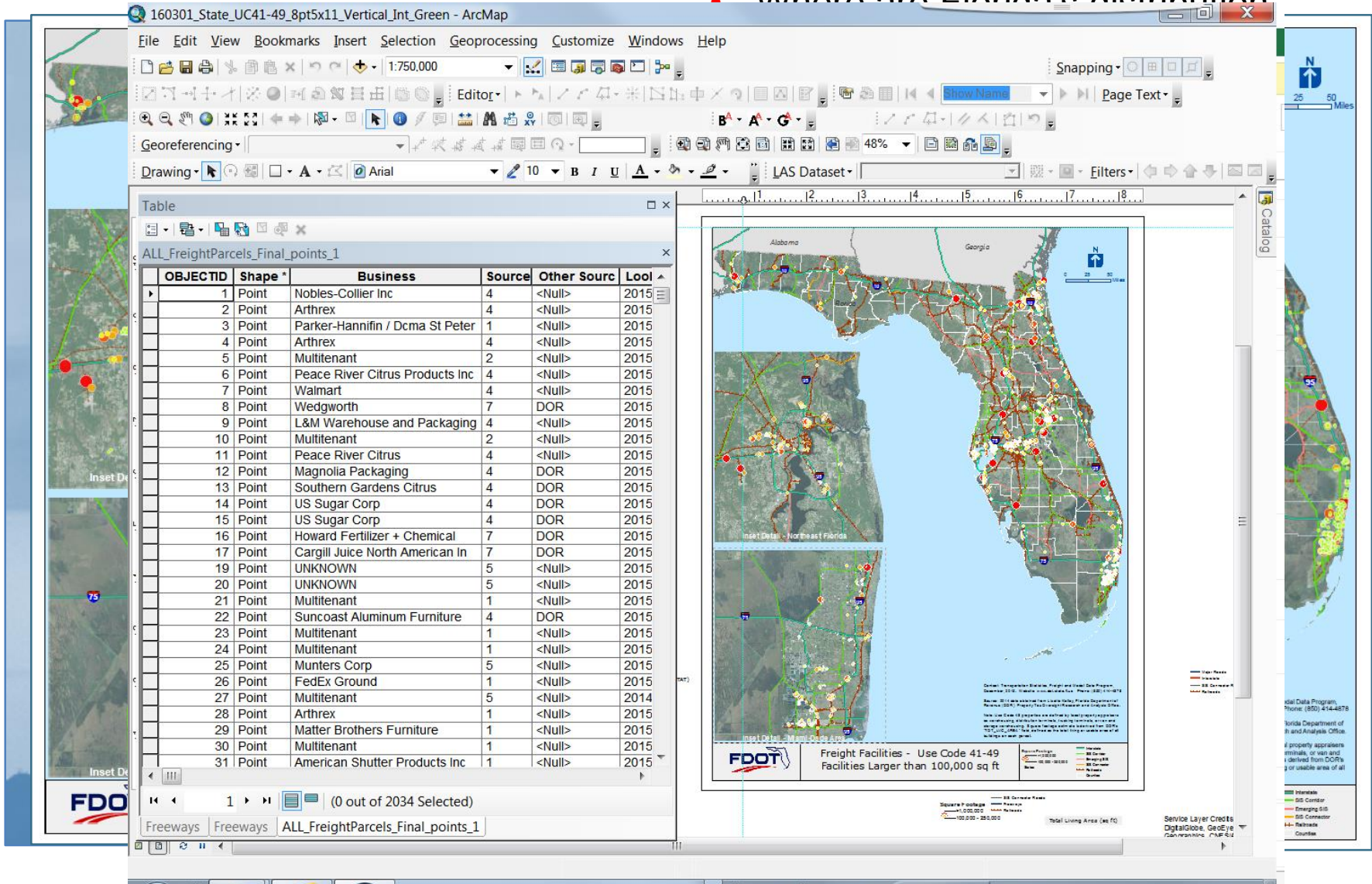
One basic apportionment method involves using employment, population, or other data that reflect the amount of activity in an area. More detailed categories of data can be used such as manufacturing and transportation employment. For this example, total estimated employment for year 2013 (source: Census Quickfacts) is used to apportion the FAF 2012 provisional estimates from the FAF Miami region to Miami-Dade County. Table 4-1 demonstrates this common, basic method of apportioning the regional total to counties based on the percentage of employment in each county. Using this method, an estimate of FAF-based tons in Miami-Dade County is 133,944,935 annual tons. If needed, the user now can present two estimates of commodity flows for Miami-Dade County (78,122,529 tons from TRANSEARCH and 133,944,935 tons using FAF) provided that these estimates are accompanied with the necessary caveats regarding dataset differences and data limitations.

SWOT ANALYSIS OF FAF AND TRANSEARCH DATA, MARCH 2016

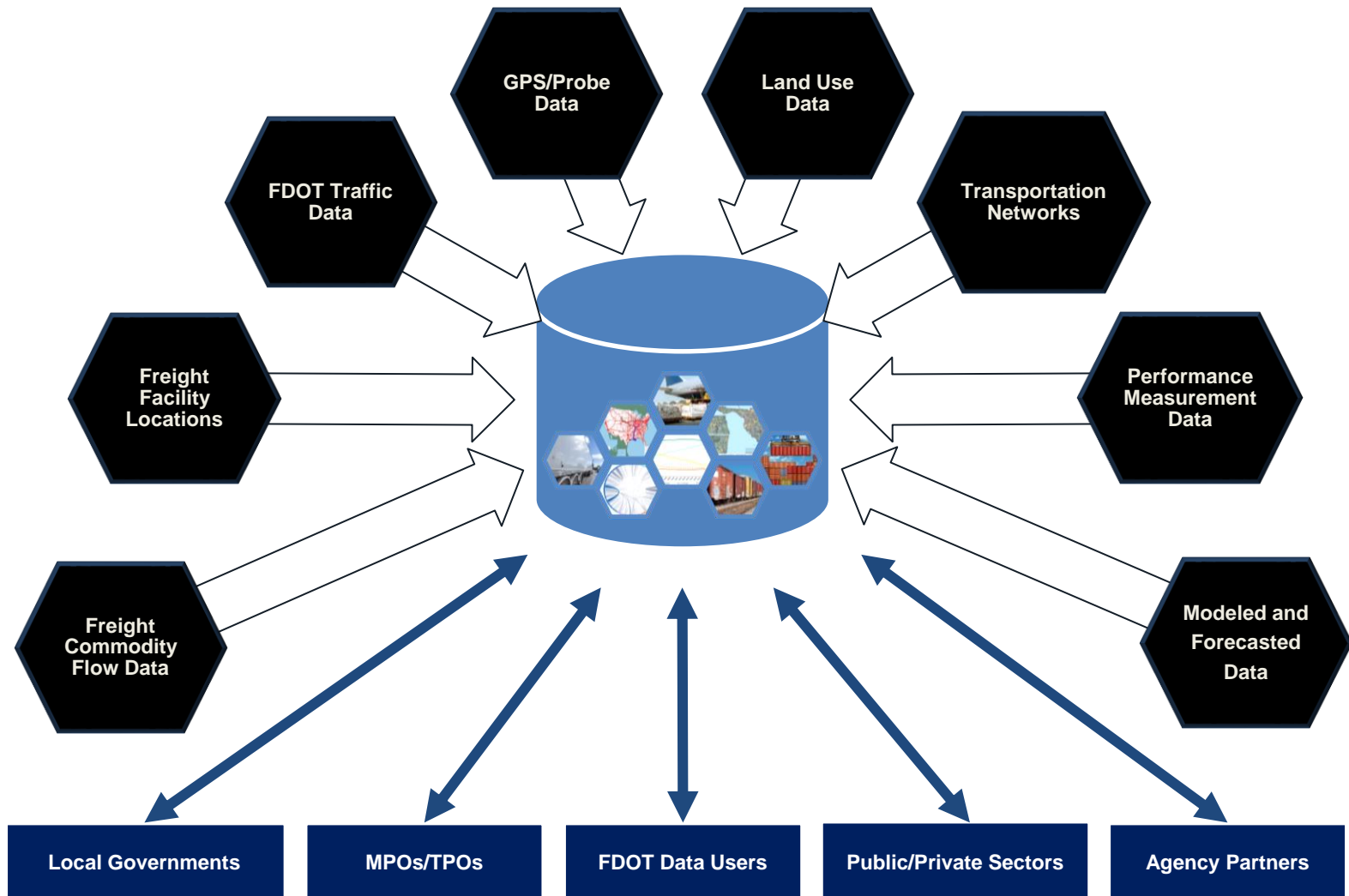
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# Freight Facility Dataset

Where are Florida's distribution



# Optimized Freight Data Supply Chain



# Questions/Comments?

## FOR ADDITIONAL INFORMATION



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